



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,294	09/13/2005	Juha Majjala	TAMPPAT-14	1070
36528	7590	07/19/2007		
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			EXAMINER PARKER, FREDERICK JOHN	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 07/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,294	MAIJALA ET AL.	
	Examiner	Art Unit	
	Frederick J. Parker	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5-9-05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

2. Claim 7 is objected to because of the following informalities: claim 7, line 3, "power" is a typo; line 17, "in the a " is a typo. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al EP 982 120. All citations are examples; there would be additional support throughout the reference.

Art Unit: 1762

Arai et al teaches a method for coating paper webs which may include fibers[0022] comprising the steps of forming a coating powder made up of an appropriately proportioned mixture of an inorganic fine particle component and an organic powder binder component which is applied by electrostatic means [0080] (see figure 3 and accompanying texts) onto the web 32 by a negatively charged applicator (necessarily comprising an electrode) 38, with oppositely charged electrode 36 beneath the web. The powdery coating on the web is transported to dual nip fixing rollers 35 where the coating is heated and fixed ("finishing") to the web substrate [0081-82] (see also figure 3 and accompanying text). Since the heating/ fixing involves melting [0082,93, etc], as does Applicants process (see Specification [0007]), the reference meets the limitation of a temperature above a selected glass transition temperature.

The reference does not cite the same semantics and wording used by applicants: G' , G'' , loss factor, rubbery state plateau, etc. It does have to because the processes of the reference and as claimed, when read in view of the specification, are essentially the same. Applicants teach that polymer materials used may be styrene-butadiene or acrylate copolymers. So does Arai et al, see [0028]. As established above, both require at least some melting during the heating/ fixing step. Simply because Applicants have chosen to describe the process differently/ more technically than Arai does not impart patentability to the process, particularly given the fact the processes appear otherwise the same. It would have been apparent that fixing / heating temperatures would have been dependant upon the thermal properties of the polymer/s being used in the coating. Clearly, one skilled in the art would not have selected an arbitrary temperature or a single temperature for all coating compositions. The same argument is made for linear load, dwell time, etc which would have been determined by routine experimentation because such parameters

Art Unit: 1762

dictate the amount of time the coating sees the elevated temperature at rollers 35 and therefore the degree of fixing/ melting as required by Arai. Where general conditions of a claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation, In re Aller 105 USPQ 233. Reaction conditions do not patentably distinguish over the prior art where they constitute merely modifications of an old process which one skilled in the art would be capable of making, In re Budde 138 USPQ 71. Critical thermal properties are available in standard texts, the internet, etc. Thus Applicants specific loss factors and moduli of claims 8-12,14-17 are deemed to be simply matters of variation due to different coating materials which are not cited by the reference but would have been present because they represent inherent materials properties. When a reference discloses the limitations of a claim except for a property/ies, and the Examiner cannot determine if the reference inherently possesses those properties noted above, the burden is shifted to Applicant/s, In re Fitzgerald 205 USPQ 594 and MPEP 2112.

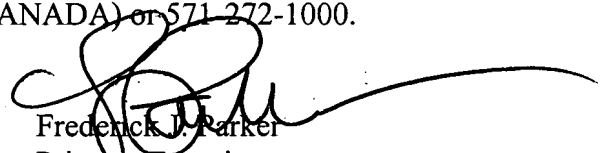
It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Arai et al and determining specific process variables dependant on the coating materials used in order to optimize the end-use product in providing the organic-inorganic coated sheet cited by Arai et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

Art Unit: 1762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp